SCANA Emergency Response Planning and Execution

Emergency Response

- Maintain corporate-wide and departmental Emergency Response Plans (Storm, Flood, Earthquake, Terrorist Attack, Blackout, etc)
- Hold periodic Mock Drills with all of the emergency coordinators
- Maintain liaison and continuous communications w/ state EMD, National Guard and other emergency response officials
- Maintain procedures to comply with critical infrastructure standards & requirements
- Maintain Emergency Communication Systems to notify key employees
- Maintain Emergency Response Center for use during emergency situations
- Utilize Communication/Voice-based restoration tracking and damage assessment system
- Continuously evaluate security of critical infrastructure

Response Plan for All Emergencies

- Track and evaluate potential response to weather systems long before impact
- Track and evaluate potential impact of terrorist threats
- Hold conference calls with other utilities and resource providers before potential impact
- Emergency Response Coordinator notifies (phone, pager, email, etc) key members of Emergency Response Organization to meet via conference call
- If situation is imminent, Emergency Response Coordinator activates emergency plans and opens Emergency Response Center (24 hour coverage, all SCANA employees are on call)
- Hold periodic meetings for status updates (Off system crews coming in, Outages, Employee Communication Updates, Public Communications, etc)

Response Plan for All Emergencies

- Emergency Response Center will remain open until the emergency is sufficiently passed and corporate support is no longer needed.
- Following every emergency situation, we evaluate effectiveness of our response and discuss opportunities to make improvements
- Continue to develop systems and data to respond to crisis.
  - Electric displays
  - SCADA upgrades (electric and gas transmission)
  - Inter-utility and corporate communication
  - Weather intelligence (e.g., Weather Bug)
  - Electric and gas damage assessment system
  - Intelligence community liaisons

Emergency Response Team

Emerg Response Coord
Responsible for Restoration of all Services

Alt Emerg Response Coord
Liaison with SC EMD and National Guard

Material/Support Coord
Distr Procure/Stores Salvage Recovery

System Plng/Load Coord
System, Voltage and Loading Analysis

Safety Coord
Safety Sppt and Coord Briefings and Audits

Auto Equipment Coord
Auto/Truck Needs/Gas/ Fuel/Maintenance

Environmental Coord
Environmental Sppt

SC Pipeline Coord

Gas Opns Support Coord
Crew Guides Operational Support

System Opns Coord
System Control/Product Liaison/Interconnet Syst

Telecomm Coord
Fiber Optic Facil/Teleph/ Data Lines/Radio

HR Sppt Coord
Food, Lodging/Admin

Security Coord
Physical Sec/Traffic Cntrl/ Courier Needs

GIS/Weather Advisory Coord
GIS Sppt/Weather Adv/ Circuit Maps

Wires Syst Coord
Elect Svc/Damage Assmt and Restoration

Pwr Delivery Coord
Trans/Sub/Damage Assmt and Restoration

Gov Affairs Coord
Liaison with Local/State/Fed Gov Agencies/EOC Staffing

Cust Service Coord
Customer Contact Crew Guides

Generation Sppt Coord
Lrge Gen/Heavy Equip/ Engineering Sppt

Corp Procure Coord
Procurement Sppt

Regulatory Affrs Coord
Liaison with PSC/Local/ State Reg Agencies

VCS Nuclear Coord
Engineering Sppt

Emerg Prepar Coord
Restore Coord/Mutual Assist Contract Res/RESTORE Tm

Admin Sppt Coord
Logistics

Info Systems Coord
IS Support

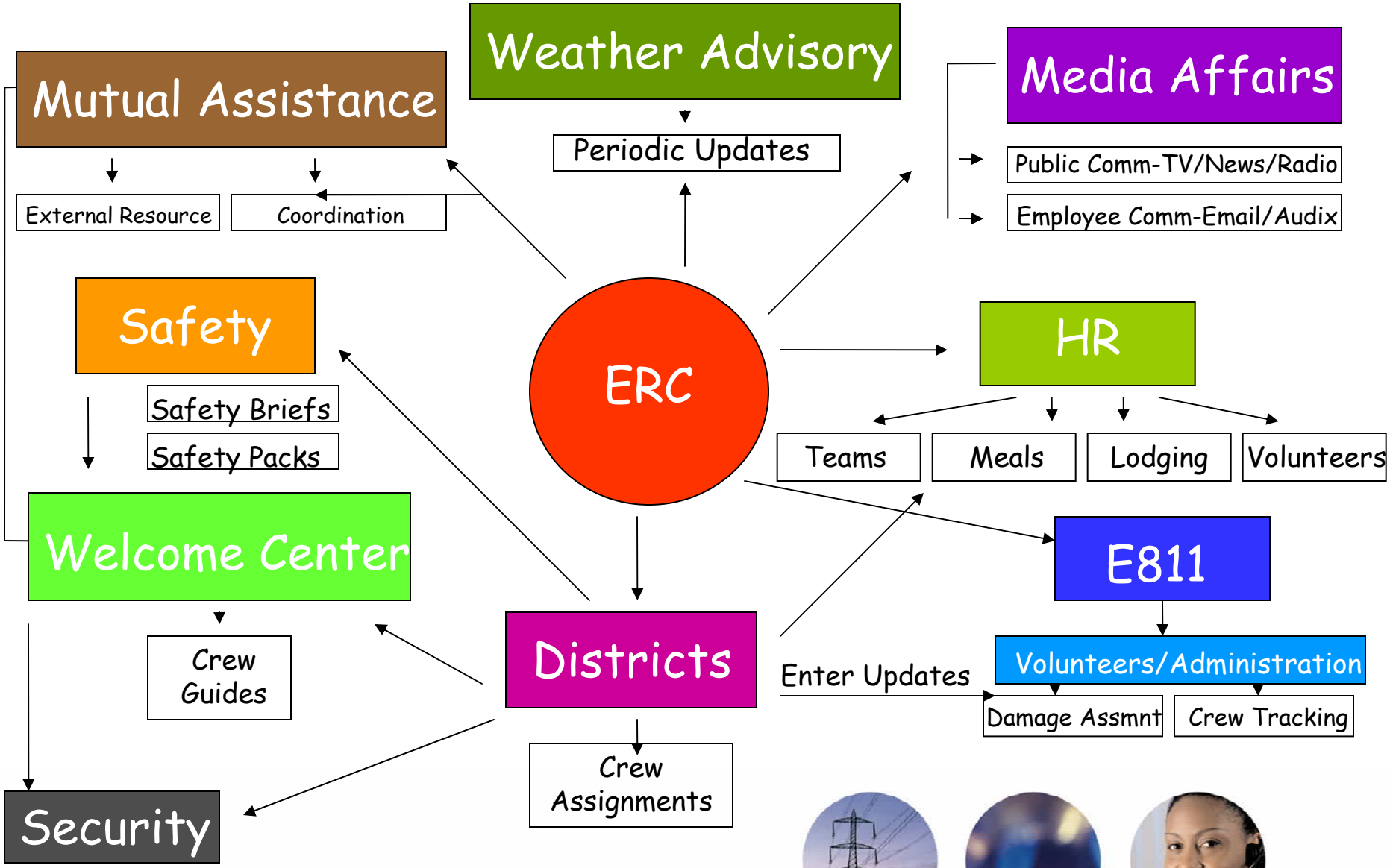
Public Info Coord
Media Contact/News Releases

Overall Key Cust Cont Coord
Liaison with Trans/Distr Key Cust Contact Rep

PSNC Energy Coord

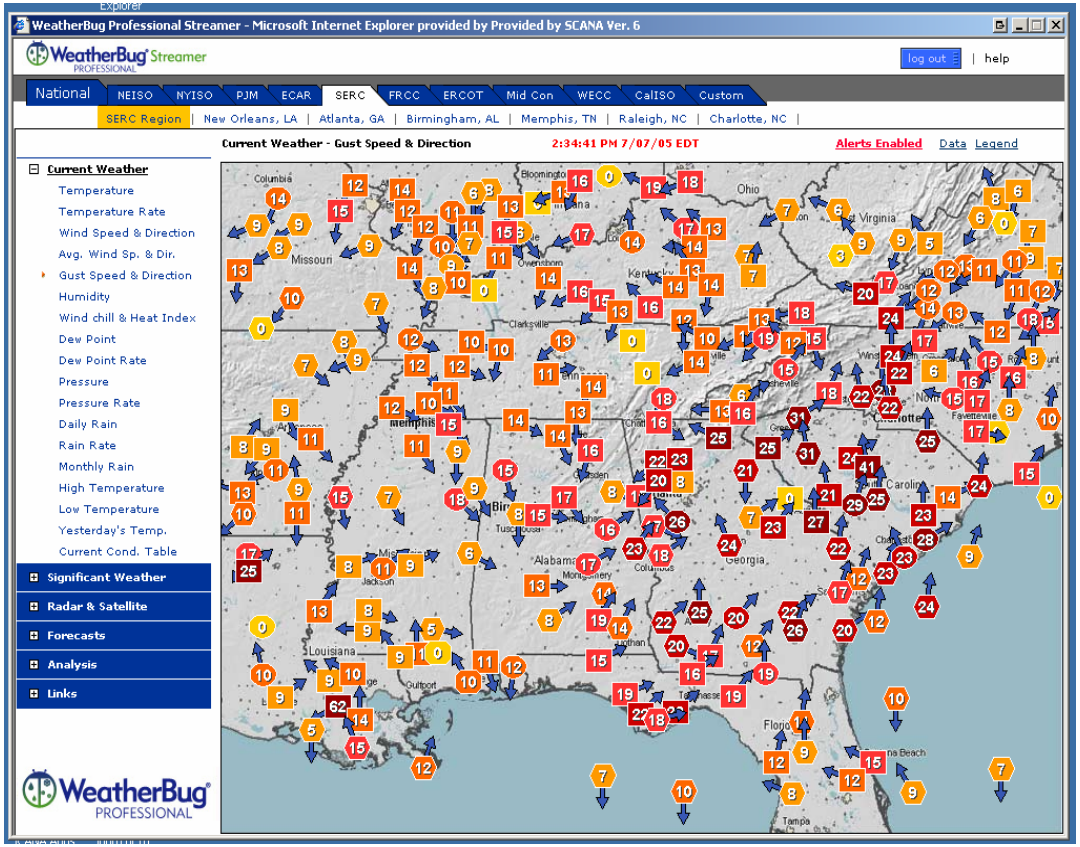


Emergency Response Center (ERC) Flowchart



Weather Bug

- Continuously updating wind, speed, direction, rainfall and temperature
- Wind, speed, direction, rainfall and temperature, as well as camera



Crisis Response

- Critical Infrastructure
- Interaction between utilities during emergencies

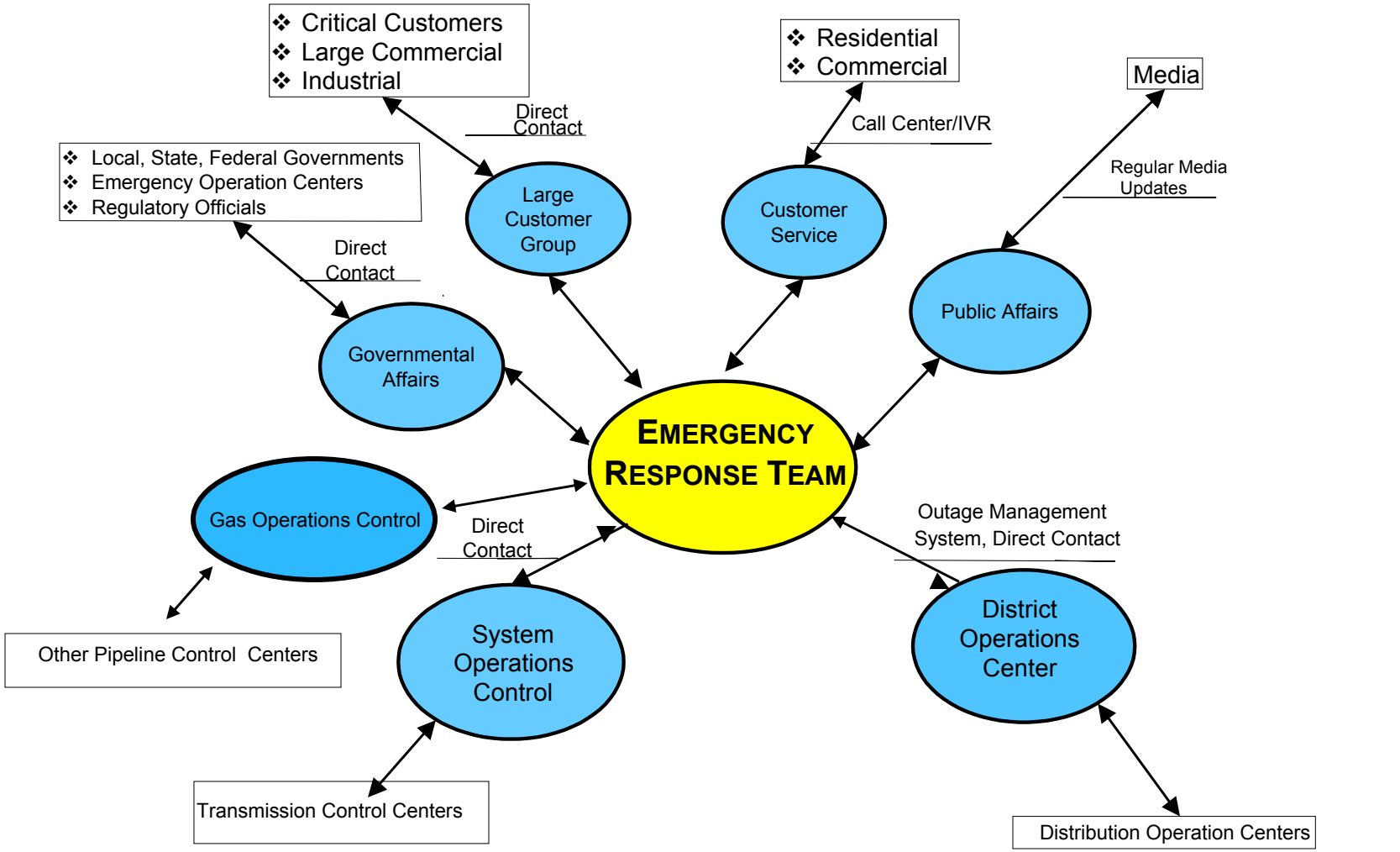


Gas Transmission System Monitoring

Critical Role of Communication

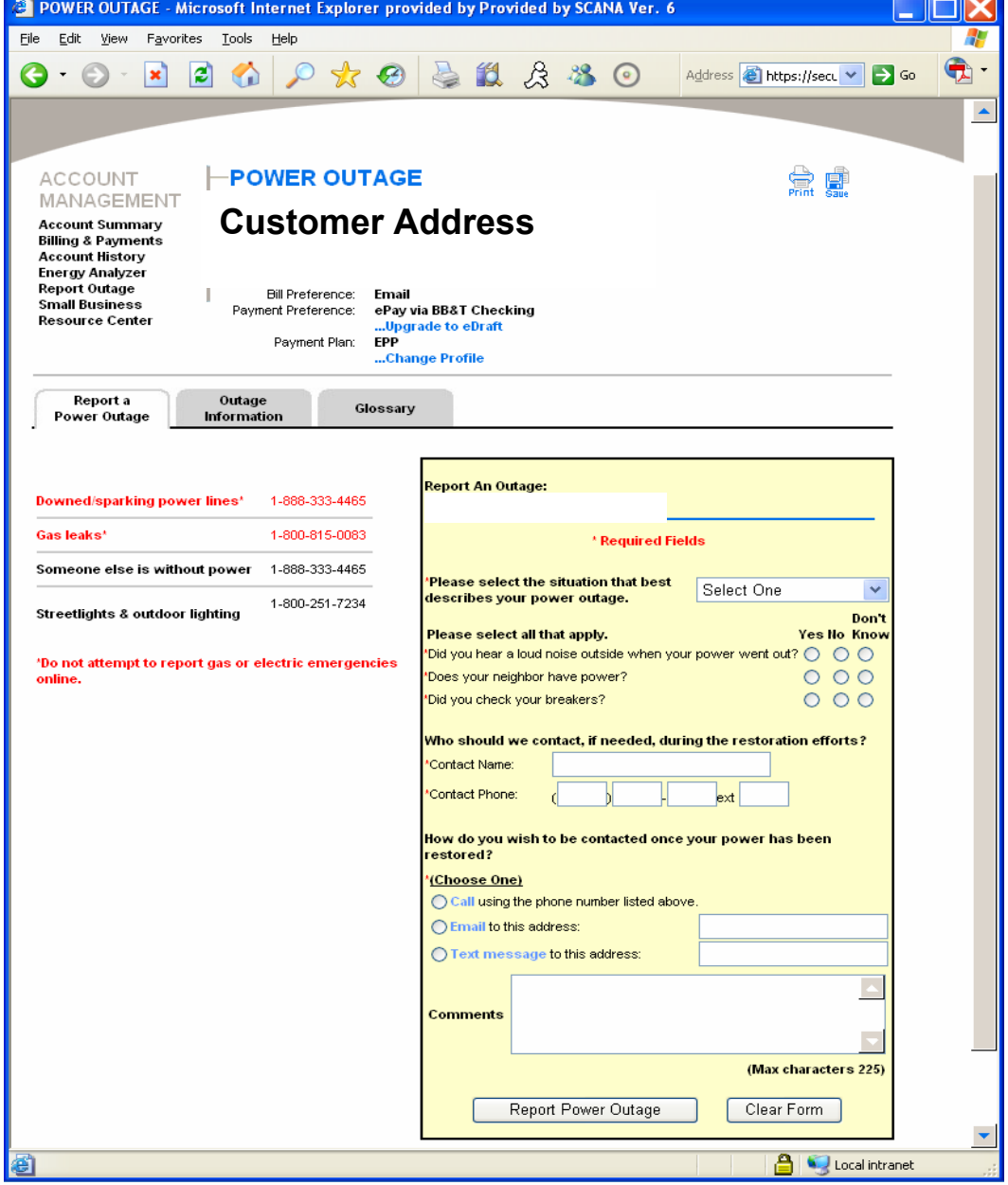
- Designated Governmental Affairs representatives keep governmental entities informed
- Mutual Assistance
- Utility communications
  - SERC, NERC,DOE, DHS and FERC, STATE EMD, National Guard and DOT for gas issues

Emergency Communication



Customer Communications

- Customer Communication
  - News Media
    - Public Service Announcements
    - Advertisements (Hispanic outreach)
    - Frequent status updates by company spokespersons
  - Web reporting and updates



Online Outage Reporting

Customer Frontline Response

Safety Culture

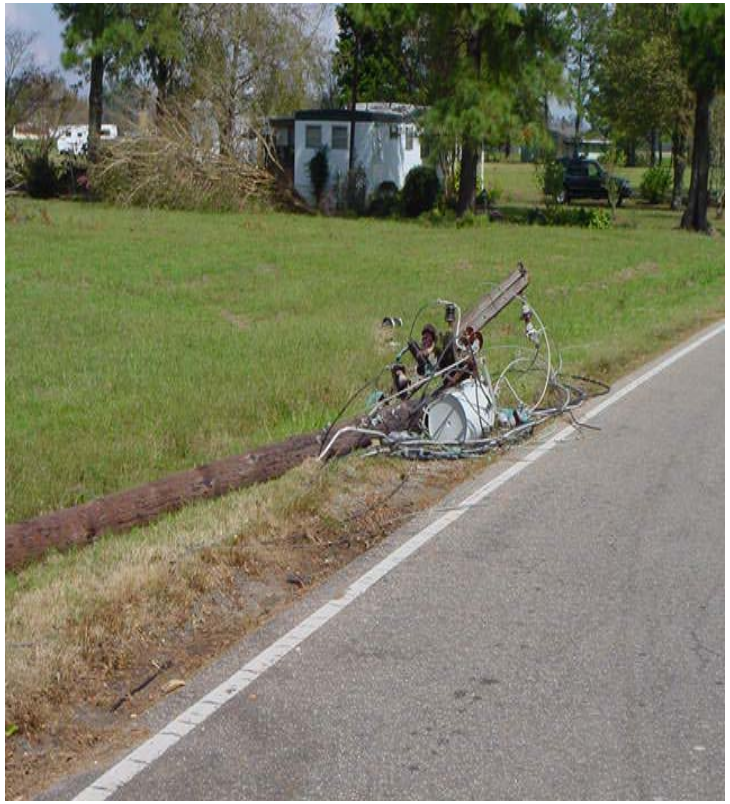
- Public and Employee Safety
  - Safety Advisors in the field
  - Major push for safety in all communications

Customer Service

- Call Centers
  - High volume calling
  - Damage assessment and SCADA play a critical role in delivering timely, accurate information to customers
- Technology

Damage Assessment

- 300+ trained non-operational personnel
  - An additional 400+ storm support personnel



System Improvements

- Evolving technologies
- Distribution SCADA System
- OMOS

Distribution SCADA

Supervisory
Control
And
Data
Acquisition

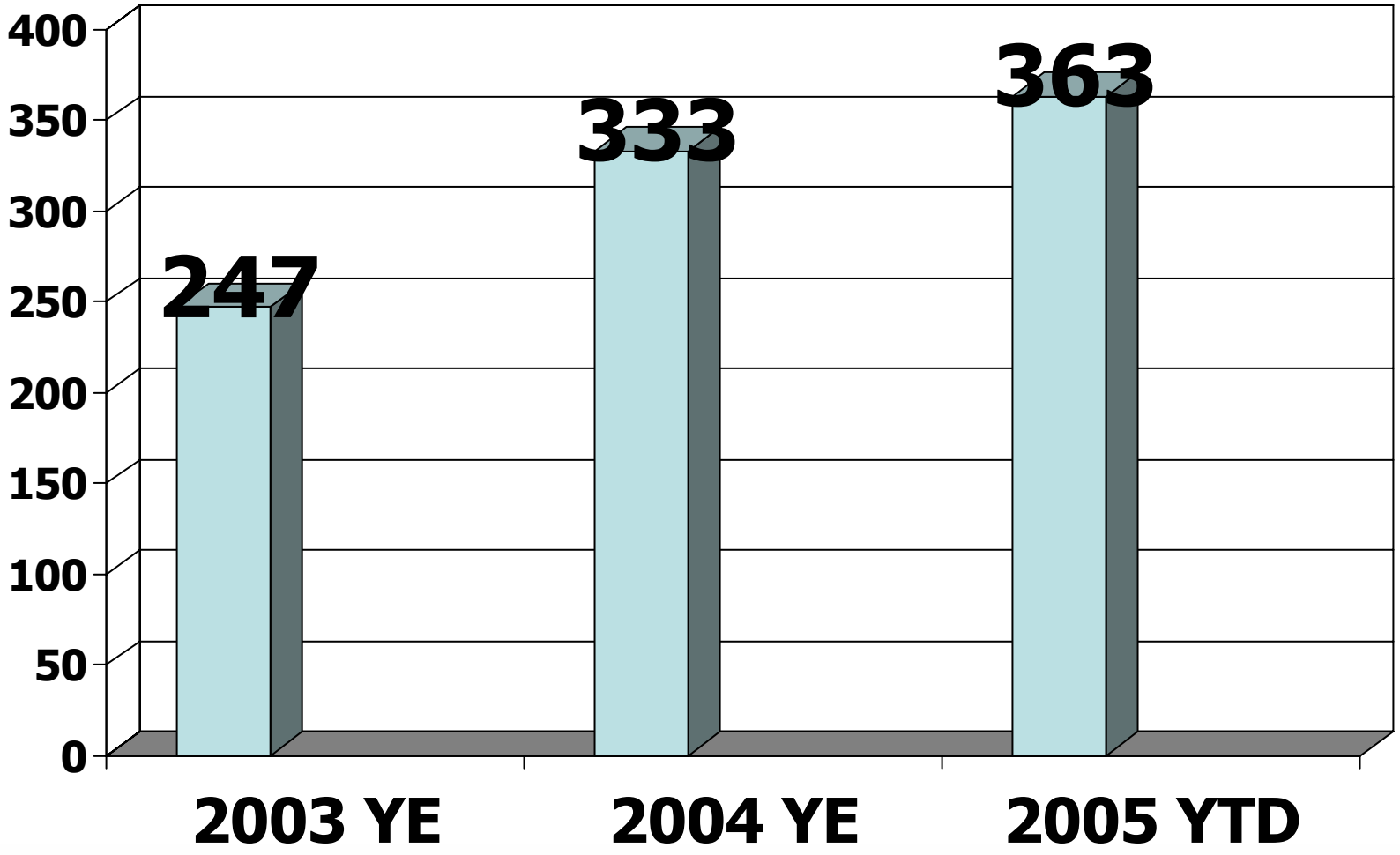
How do we use SCADA?

- Monitor status of equipment
- Monitor loading of equipment (substations & line devices)
- Monitor weather information
- Remotely control equipment
- Isolate line faults and restore service

SCADA History

- 2 SCADA systems purchased in 1987
  - Columbia
  - Charleston
- 98% of our substations now have SCADA

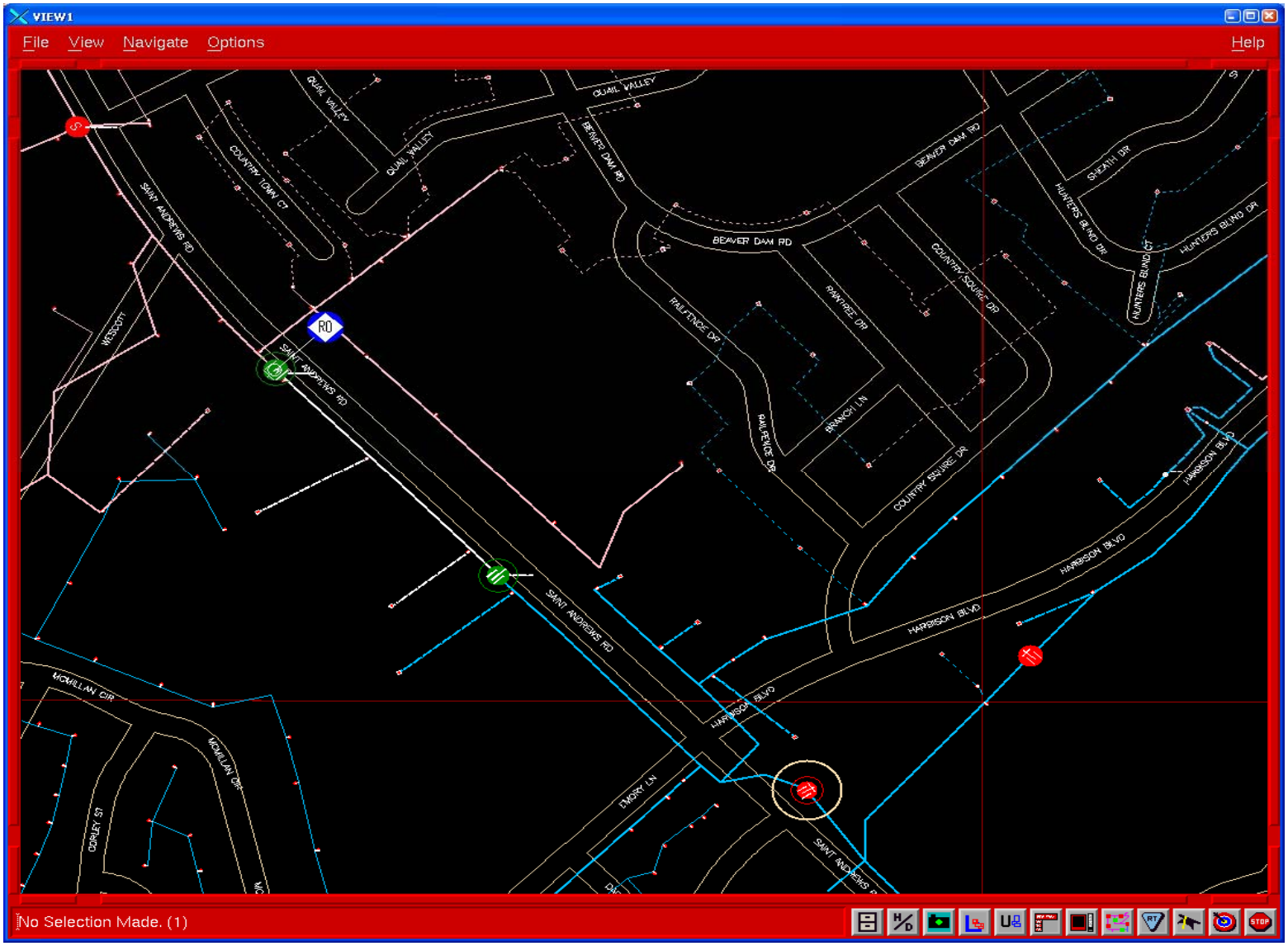
SCADA Switch Totals



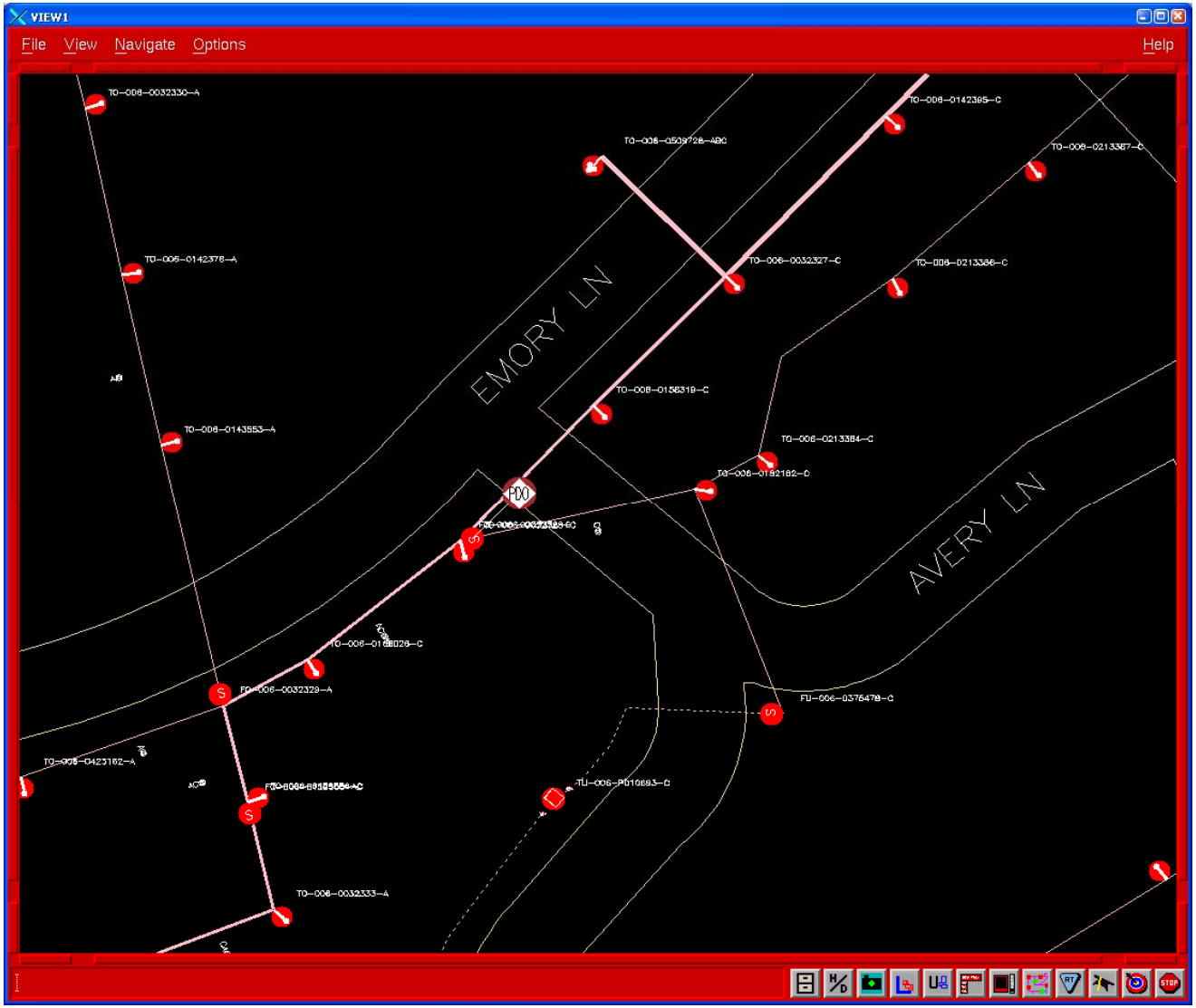
2005 Electric and Gas Distribution Focus

- Consistent Dispatch Support
- One Data Model
- Centralized Maintenance Program
- 5 year SCADA installation plan

rlc1 Looks like too-long hyphens in the Notes pane. I think these are en, sted of em-dashes.
a-rcurry, 4/21/2005



OMOS System Capabilities



Pinpoints problems/likely causes

http://omsed/NRT_Client.VBD - Microsoft Internet Explorer provided by Provided by SCANA Ver. 6

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://omsed/NRT_Client.VBD Go Links

CommandCentricity Executive Dashboard

Region

Region: All

Op Area: All

Work Area: All

Summary

Event | Circuit

Historical Event

- Critical
- Medical
- Key

Customer

- Emergency
- Non Emergency

Call

Fuzzy | County Total

Historical Report

Historical Region

Total Events	# Out	# Crit	# MED	# KEY
7	17	0	0	0

# Calls	# Emergency
3	0

Auto Update in 5 mins

05/26/2005 16:28

Automatic

Region Customers Totals by All

Region	Events	# Out	# Crit	# MED	# KEY	# Calls	mergency C
Chas	2	8	0	0	0	1	0
Cola	4	7	0	0	0	1	0
West	1	2	0	0	0	1	0

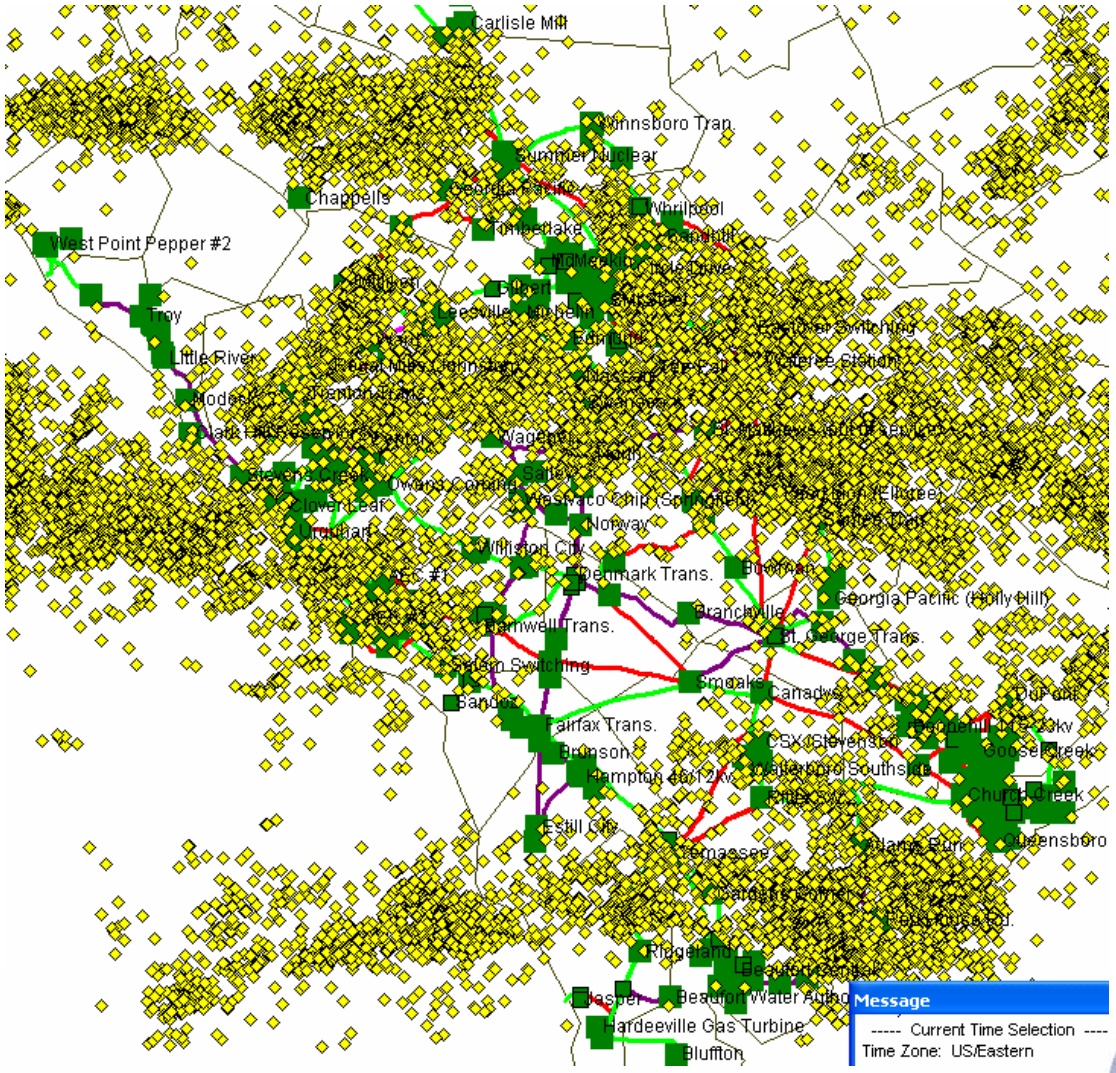
Unknown Zone

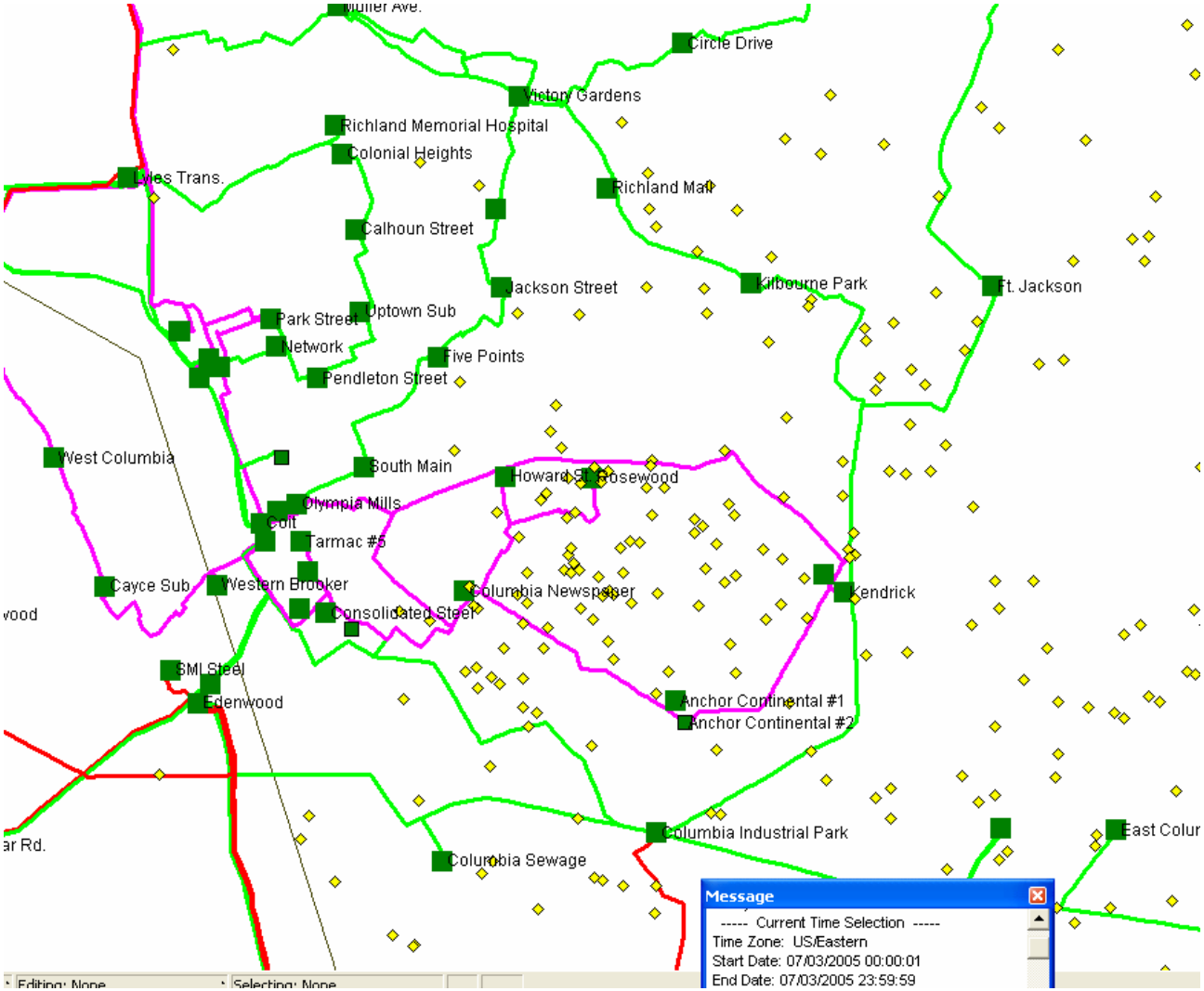


Computer Aided Dispatch (CAD)

- Currently on all electric and gas service trucks
- Immediate communication and dispatch of outage information and orders

Lightning Strike Technology




Circle Drive
Victory Gardens
Richland Memorial Hospital
Colonial Heights
Lyles Trans.
Richland Mall
Calhoun Street
Jackson Street
Kilbourne Park
Ft. Jackson
Uptown Sub
Park Street
Network
Five Points
Pendleton Street
West Columbia
South Main
Howard St
Rosewood
Olympia Mills
Colt
Tarmac #5
Cayce Sub
Western Brooker
Columbia Newspaper
Kendrick
Consolidated Steel
BMI Steel
Edenwood
Anchor Continental #1
Anchor Continental #2
Columbia Industrial Park
East Colur
Columbia Sewage
Message
----- Current Time Selection -----
Time Zone: US/Eastern
Start Date: 07/03/2005 00:00:01
End Date: 07/03/2005 23:59:59




Rosewood
Message
----- Current Time Selection -----
Time Zone: US/Eastern
Start Date: 07/03/2005 00:00:01
End Date: 07/03/2005 23:59:59



Equipment

- Back yard bucket
- Back yard line truck

SCANA CORPORATION


SKYLIFT
MINI-DERRICK 33 PLUS
SKYLIFTUS.COM

Questions ?